# Coastal Resources Management Project ii - 2000 Results

INCREASING CONSERVATION and SUSTAINABLE USE of COASTAL RESOURCES

The Coastal Resources Management Project II is a partnership between the U.S. Agency for International Development and the University of Rhode Island Coastal Resources Center

# The Coastal Resources Management Project Making an Impact Around the World



Coastal Management has trained over 150 coastal managers from 45 countries.

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### Preface

oastal areas are the primary habitat for humanity. More than half the world's people live in coastal areas on less than 10 percent of non-polar land. This land and water base supports a significant majority of human economic activity. It also provides the critical habitat for much of the world's biodiversity. Environmentally healthy coastal lands, waters and resources contribute to poverty alleviation, food security, and the economic growth of developing nations.

USAID'S Coastal Resources

Management (CRM) partnership

with the University of Rhode Island's

Coastal Resources Center is the

agency's flagship program for addressing coastal issues. Responding to the growing demand from USAID missions and partners for continued assistance, the partnership was recently extended for an additional two years – through 2003.

Each year, as we review our actions and plan for the future, we ask ourselves the simple question, "What has changed because of our investment of time, ideas and money?" This year, as in years past, the answer is significant, as we have:

 Helped establish a new Ministry of Marine Affairs and Fisheries in Indonesia

- Contributed to new coastal resources management policies in Lampung and North Sulawesi in Indonesia, in Tanzania, in Mexico, and in Central America
- Culminated four years of hard work with Mexico's dedication of its first National Marine Park initiated by a community rather than the national government
- Completed the sixth biennial Summer Institute in Coastal Management,
   bringing its alumni corps to over
   150 professionals from 45 countries
- Established and strengthened the 11-member Indonesian Coastal University Network (INCUNE)



The CRM partnership continues to continues to contribute to the global search for good management practices (GMPs) and how to more effectively link science and management. GMPs are used to improve the effec-

In addition, the CRM partnership has remained an important voice in the global dialogue on critical coastal issues. The partnership supported USAID's work with the U.S. Coral Reef Task Force and the International Coral Reef Initiative (ICRI), and made important contributions to the 9th International Coral Reef Symposium (ICRS).

tive and balanced use of coastal resources while reducing environmental impacts. During 2000, the partnership was actively involved in a range of GMP initiatives in areas ranging from aquaculture in Central America and Tanzania, to incorporating gender issues in ICM programs in Indonesia, to shorefront development in Mexico.

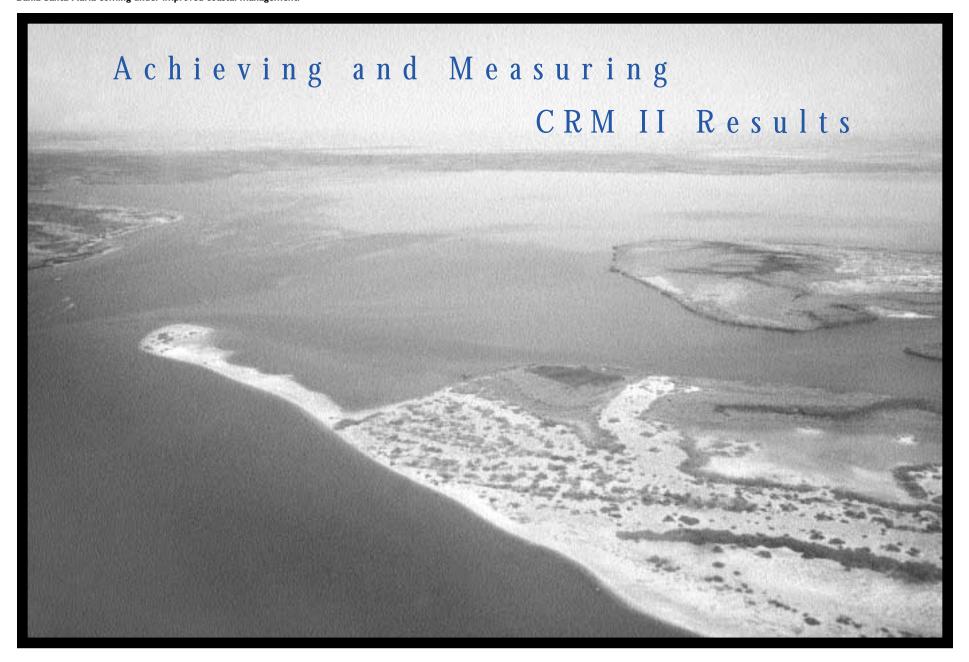
USAID is proud of the contributions and leadership that our partners and we have brought to the important arena of coastal management. We are also humbled by the challenges that lie ahead. As we enter the 21st century, there is no doubt that efforts to find solutions to increasingly urgent coastal issues must remain central to our development efforts.

Sincerely,

**David Hales** 

Deputy Assistant Administrator

Center for Environment



ow does one measure success in integrated coastal management (ICM)?

What are the objectives of an ICM initiative? How can you tell you have achieved those goals over the course of one year, five years or even after a decade?

These are the questions that CRM II staff grapple with every day. And they are hardly alone. Development agencies, funders, coastal management professionals, the media, residents of coastal communities, and government agencies and elected officials from the nation's capital down to the village level all want to see how their involvement has a positive impact.

Measuring progress, analyzing and learning from ICM work that has been done, and then widely sharing both the successes — and failures — among the coastal management community is a CRM II priority.

CRM II uses both quantitative and qualitative measures, as numerical indicators only tell part of the story. Through qualitative self-assessment, CRM II attempts to docu-

ment and understand why specific field project strategies were selected, how well they worked, and how and why they were incrementally revised over time. The goal of the CRM II monitoring program is to measure real impacts, to learn from experience and to improve the practice of ICM.

CRM II success is measured against its strategic objective: the increased conservation and sustainable use of coastal resources.

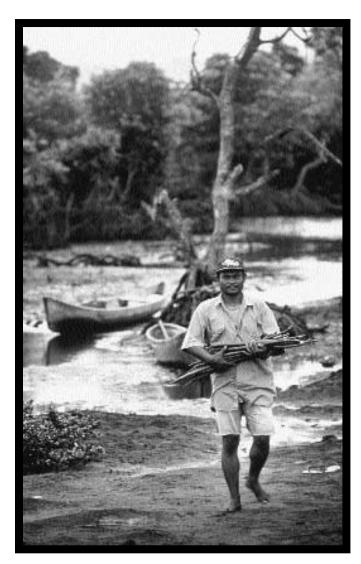
Two activity streams are used to achieve this objective:

### Field assistance to key countries to improve:

- Strategies and policies for ICM
- Stakeholder understanding and participation in ICM
- Human and institutional capacity for ICM

#### Global technical leadership to:

- Develop, disseminate, and promote the broad adoption and use of effective coastal management concepts and tools
- Increase capacity of coastal management professionals



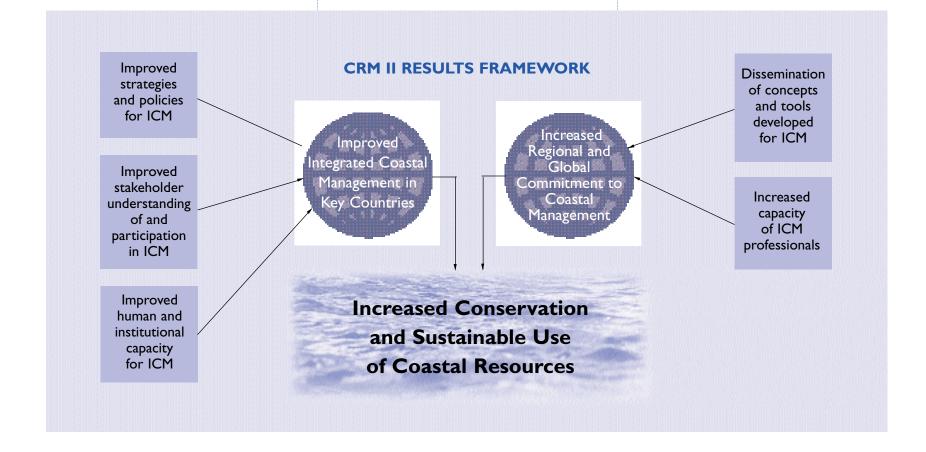
Mangrove planting programs can help build awareness and involvement in coastal management issues by local residents, who then benefit from the results.

The interplay between field projects and global initiatives is central to CRM II's overall design. Technical assistance and capacity building in the field results in real improvements in the coastal environment and the well-being of coastal communities. Field sites provide a "living laborato-

ry" in which to develop, test and refine coastal management concepts and tools that in turn enrich CRM II's regional and global leadership initiatives.

The context of a place – its evolving social, political, economic and environ-

mental conditions – is critical to designing and achieving ICM strategies and project outcomes. For that reason, a brief overview of the context in each area where CRM II works is included in each site-based chapter in this report.



#### **Tangible Successes**

CRM II uses the measures of areas where "improved" and "effective" management of coastal resources are occurring to define on-the-ground achievements. They are measured in hectares. Each hectare represents an area roughly the size of two football fields, approximately 50 meters by 200 meters.

The area reported is a cumulative total, representing the areas where significant progress has been made and/or sustained since the inception of the CRM projects in 1985. In FY 00, CRM II sustained improved governance in over 3.2 million hectares of coast in 16 sites. This included an additional 284,346 hectares in Bahía Santa María, Sinaloa, in the Gulf of California, Mexico. There, in partnership with Conservation International, CRM II is assisting the multistakeholder Conservation and Development Commission to develop a participatory conservation and management plan for the bay.

CRM II sites that have achieved effective management remained at 163,391 hectares

in FY 00. But as revealed in each country's story, the scope and significance of impacts at each site continue to expand, providing benefits to coastal inhabitants and generating experience that can better inform national efforts and promote replication.

#### Policy Successes

Much of CRM II's work is directed at creating and implementing

ICM strategies and policies that are essential pre-conditions for improved coastal environments and improved quality of life for local residents. The work done in CRM II sites in

**Defining Success** 

In CRM II's results monitoring of on-the-ground progress, two categories of coastal management are used: "Improved" and "Effective."

Improved is defined as "when an ICM program is in place and functioning," because it enhances the management process, which can lay the groundwork for tangible improvements in coastal resources.

Improved management is indicated when at least one of the following activities have been completed and targets have been set for the remaining items:

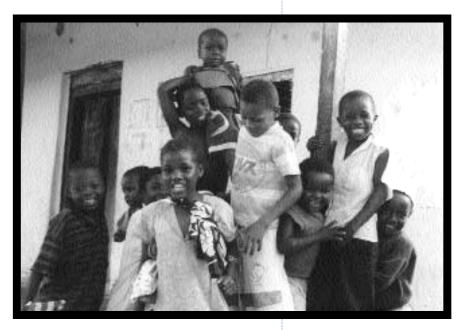
- Assessment completed
- Legal framework established
- Planning completed
- Management actions implemented
- Capacity developed
- Monitoring action implemented

Effective is defined as "where environmental conditions are being monitored and resource degradation is documented as slowed, stopped or reversed."

Generally, effective management sites are geographically smaller than those falling under the improved category, and will often be associated with a specific type of coastal environment or resource, such as coral reefs or mangroves. Two requirements must be met for management to be deemed effective:

- Environmental quality is maintained or improved, and/or the rate of degradation is reduced.
- Institutional ability to monitor and respond to threats is demonstrated.

FY 00 laid a solid foundation for future progress, as well as created products which can be replicated and serve as models worldwide.



Tanzania's unprecedented planning process to create a national coastal policy will benefit future generations of coastal residents.

In Indonesia, a number of village-level ICM plans, community marine sanctuary ordinances, and a regency-level marine sanctuary ordinance were developed and adopted during FY 00. These plans are the first tangible examples of bottom-up planning and management that are officially sanctioned by government. Interest in the North Sulawesi models is high throughout the province and nation. At the national level, advisors from the country's coastal management program, Proyek Pesisir, are using these community-based achieve-

ments to show the benefits of decentralization and how they can be enabled by national policy actions.

In Tanzania, the national ICM policy, which has been developed through an unprecedented participatory practice process, was delivered to the Cabinet in late FY 00. Adoption is anticipated early in 2001. CRM II's Tanzania Coastal Management Partnership (TCMP) has also provided national policy guidance on mariculture, an emerging economic force

on the coast. The TCMP's intersectoral Mariculture Working Group has developed science-based guidelines that will be implemented through sectoral agencies as they carry out their permitting process. This represents the first time that multiple agencies have agreed to utilize a coordinated, transparent suite of criteria to make development decisions.

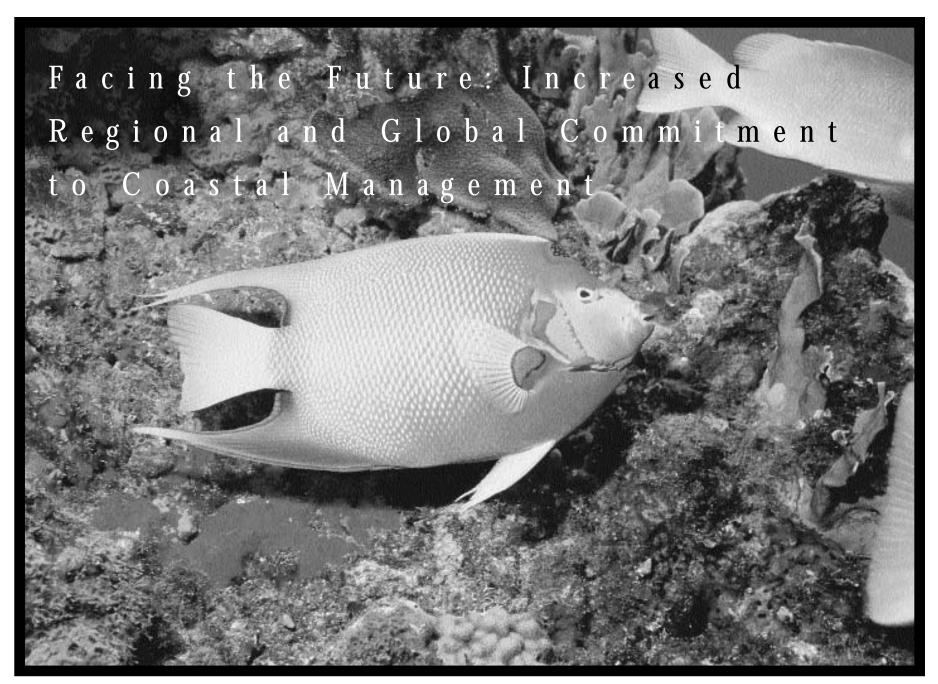
In June 2000, Mexican President Ernesto Zedillo officially declared Xcalak's Marine Park in Quintana Roo. This communitybased marine protected area has provided the impetus for other local coastal management plans and strategies to be developed. It is also being used as a model elsewhere in the country and regionally in Central America. On the other side of the country, in the Gulf of California, the Declaration of Culiacan was signed in November 1999. This declaration is an agreement among a variety of governmental and non-governmental organizations to collaborate and share information to promote improved natural resources management in the Bahía Santa María region. This sets the stage for developing an ICM plan for the bay.

#### **PERFORMANCE RESULTS**

#### **Improved Strategies and Policies for ICM**

Country	Site	ICM Policy Initiative	Developed	Adopted	Implemente
Indonesia	Blongko	Municipal Marine Sanctuary Plan	('98)	('99)	('00)
Indonesia	North Sulawesi	Regency-Level Marine Sanctuary Ordinance	(00)		
Indonesia	Blongko	Village-Level ICM Plan	(00)	(.00)	
Indonesia	Talise	Village-Level ICM Plan	(00)	('00)	
Indonesia	Bentenan-Tumbak	Village-Level ICM Plan	(00)	(.00)	
Indonesia	Blongko	Community-Based Marine Sanctuary Village-Level Ordinance	(00)	(,00)	
Indonesia	Talise	Community-Based Marine Sanctuary Village-Level Ordinance	(00)	(.00)	
Indonesia	Bentenan-Tumbak	Village-Level Marine Sanctuary Ordinance	(00)	('00)	
Indonesia	National	National Marine Strategy	('98)	('98)	
Indonesia	Lampung Pemantang Pasir	Provincial Strategic Plan	(,00)	(,00)	
Mexico	Xcalak	Fisheries Management Agreement	('98)	('98)	('99)
Mexico	Xcalak	Marine Park Authorization	('98)	(,00)	
Mexico	Bahía Santa María	Declaration of Culiacan	(,00)	(,00)	
Mexico	Xcalak	Tourism Strategy	('99)	('99)	(00)
Mexico	Quintana Roo	Low-Impact Tourism Development Guidelines	('98)	('99)	(00)
Kenya	Nyali-Bamburi-Shanzu	Coastal Management Steering Committee Action Strategy	('96)	('96)	('99)
Kenya	Nyali-Bamburi-Shanzu	Jomo Kenyatta Beach Management Strategy	('98)	('99)	('99)
Tanzania	National	Capacity Building Action Strategy	('99)	('99)	('99)
Tanzania	National	Mariculture Action Strategy	('99)	('99)	('99)
Tanzania	National	Coastal Management Strategy	('00)		

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CRM II plays a lead role in the global efforts to protect coral reefs, which is a true test of the world's ability to effectively manage coastal resources.

#### The Global Context for ICM

Coastal ecosystems play a central role in the processes that sustain life on earth and in the prospects for human development. Coastal lands are less than one-fifth of the inhabited land space, yet they contain almost half of today's five billion people. The proportion of the world's people that will live along coastlines is expected to increase to three-quarters by mid-century. While there are some important exceptions, at the global scale, the trends in environmental qualities are all in the wrong direction. Critical coastal habitats such as wetlands and coral reefs are being destroyed, fish stocks are declining, pollutant inflows are increasing, fresh water is in shorter supply, and climate change is affecting long established patterns of rainfall, storms and sea level. From a global perspective, coastal peoples see a sharper divide between the haves and the have-nots, and there is increasing conflict over the allocation of ever more scarce natural resources and space. Governance institutions often do not have the power or abilities to address these forces.

Since the "Rio Summit" (the United Nations Conference on the Environment and Development) in 1992, the practice of ICM has expanded and evolved globally. ICM is increasingly recognized as a promising response to the accelerating deterioration of the environmental quality of the world's coasts. International agreements – from those on climate change to biodiversity – identify ICM as a way to address critical issues. Coastal management issues and the ways to combat threats to the world's coasts have been added to the agendas of international donors, national governments, non-governmental organizations (NGOs) and universities.

If ICM is to realize its hoped-for potential, there must be consensus on the work to be done. Basic elements critical to the success of ICM are:

- On-the-ground examples of ICM producing tangible governance, environmental and socioeconomic results in a wide range of contexts at different scales
- Research and learning that shares practical experience throughout the ICM community
- Capacity building on global, national and local scales
- The development of tools and techniques that help management efforts succeed
- Increased input by ICM professionals into national policy discussions on issues well beyond those of ICM
- Establishing more aggressive networking and communications to disseminate information widely through a variety of new technologies

As interest and involvement in ICM have grown, so have CRM II's contributions and influence. There is increasing acceptance of CRM II's approach and emphasis on good governance as a necessary precondition for an improved coastal environment and human quality of life. There are a growing a number of CRM II "living models," as yet at small scales, but in which good coastal governance has indeed led to improved environmental and human conditions.

CRM II's challenge as it enters the new millennium is to discover, model and advocate approaches to ICM which sustain successes in improved coastal governance, and build on those successes to achieve the desired end outcomes of improved environmental quality and quality of life at significantly larger scales.

### International Partnership for Coral Reef Conservation

Internationally, coral reef conservation is high on the ICM community's agenda, and provides a range of challenges. The management and conservation of coral reefs is critical to biodiversity and food security. And the well-being of coral reefs is determined not only by local factors such as fishing and water quality, but also by global warming. The world's ability to protect this "underwater rain forest" is perhaps the first and most urgent test of our ability to effectively manage our coastal resources. Reefs are a useful yardstick for measuring the success and impacts of coastal initiatives. Working with many partners, CRM II is actively engaged in the worldwide movement to protect these invaluable treasures.

In FY 00, CRM II continued to support USAID's work with the U.S. Coral Reef Task Force and the International Coral Reef Initiative (ICRI). CRM II staff submitted detailed comments on the Task Force's U.S. Coral Reef Action Plan, participated in the March 2000 Task Force meeting in Washington D.C., and implemented a number of the Task Force's action items for reducing global threats to coral reefs. The family of CRM projects also continued to contribute to ICRI's overall work on reef protection. By working hand-in-hand with

these initiatives, CRM II plays an important role in turning international principles into tangible, on-the-ground action and ensuring that the global dialogue reflects and supports field experience.

The 9th International Coral Reef Symposium (ICRS) was held in Bali in October 2000. With over 1,500 delegates in attendance, this was perhaps the largestever gathering of individuals concerned about the conservation and sustainable use of coral reefs. CRM II, especially its Indonesian field program, Proyek Pesisir played an important role in organizing sessions and delivering papers on community-based coral reef management and the socioeconomic impacts of coral bleaching (see also the Asia section). CRM II, as part of its work to support international and local media reporting of coral reef management, also arranged post-conference tours by scientists and the media of Proyek Pesisir field programs in Lampung and North Sulawesi.

### Learning from CRM II Experience

CRM II continues to pioneer and apply approaches for the analysis and evaluation of coastal management, making a major contribution to learning across the ICM community. Using CRM II's suite of tools and techniques for ICM planning and implementation, more and more ICM practitioners and funders, as well as governments and NGOs, can evaluate the progress of their work, and make changes to help ensure future success.

A three-day capacity-building
workshop on evaluation methods was held at the University of
Rhode Island for CRM II staff on
how to conduct coastal management evaluations for the purpose of
learning and discovering ways to
further improve ICM strategies and
actions. CRM II partnered with IUCN:
The World Conservation Union, in
a peer evaluation of the regionally recog-

### Assessing Progress in Ecuador

Because of the growing experience of CRC and CRM II in all aspects of ICM in the U.S. and worldwide, staff members are frequently asked to help evaluate other international donor projects.

In September 2000, the director of CRC completed an assessment of the ongoing coastal program in Ecuador for the Inter-American Development Bank (IDB). Ecuador's Pioneering Initiative in Integrated Coastal Management

was published as part of the CRM II Common Methodology for Learning series. The USAID/CRC coastal program initiated Ecuador's national ICM program in 1985. At the request of the Government of Ecuador, IDB provided its first-ever loan to a nation for coastal management in 1993. The report is a detailed evaluation of a country that has now completed a first generation of a coastal program, and provides a valuable learning model – including both

successes and failures – for other countries worldwide.

nized Tanga Coastal Zone Conservation and Development Program in Tanzania, and partnered with the Inter-American Development Bank in an assessment of the ongoing coastal management effort in Ecuador.

**Learning reports** were prepared as products of the assessments.

The Coastal Resources
Management Project (CRM I and
CRM II) is unique as one of the
longest sustained international
coastal management efforts.
Groundwork is ongoing for a

that will tell the CRM story with the goal of trying to achieve a much-needed impact – change in how coasts are managed. The agenda will both capture the past and build towards the future. One of the major products will be a book that traces the impacts of CRM projects, lessons that have emerged in terms of good project design and implementation, and recommendations to improve the

impact of ICM in the future. In addition, CRM II has been actively engaged in the development of the United Nations

### What is a good management practice?

Practical experience and scientific research provide a solid basis for the development of many GMPs. New and better methods will become available as knowledge and practice advance. As voluntary practices, they can be continually tested and modified by researchers and producers.

The level of specificity of GMPs will vary according to current practice and available technical knowledge. For example, in developing shrimp mariculture GMPs for Honduran shrimp farmers, the construction guidelines created were much more specific than those for feeding and fertilization for two reasons. First, pond construction is not new, and the practices are closer to optimization than practices related to providing good shrimp nutrition. Second, pond construction is also less likely than nutrition to be affected by complex environmental interactions.

The degree of specificity definable for each topic is also an indicator of which areas in the field require more testing and refinement, or which need more flexibility. Good management practices require a degree of flexibility and good judgement. It is the practitioners who must react to constantly changing environmental, economic and social conditions. The GMPs are intended to guide, not arbitrarily restrict farm managers.

Adapted from Good Management Practices from Shrimp Aquaculture (In press, December 2000)

Educational, Scientific and Cultural Organization's (UNESCO) Wise Practices Forum and is working with UNESCO to assist in design of an ICM good practices guide.

#### **Promoting ICM Good Practices**

Good management practices (GMPs) are those that can be used to enhance the use of coastal resources while reducing environmental impacts. The practices are called "good" management practices rather than "best" management practices, because the most successful ways of reducing environmental impacts are still evolving. During FY 00, CRM II was actively involved in a range of GMP initiatives in areas ranging from aquaculture to incorporating gender issues in ICM programs to shorefront development.

Preparation of the final report on **sustainable shrimp mariculture good management practices** developed for Honduras, in collaboration with industry, featuring technical and detailed field survey results, began in March 2000. It continues CRM II's work to turn glob-

al codes of practice for shrimp mariculture into feasible actions that promote environmentally sound, economically equitable ways of farming shrimp. The Latin America aquaculture experience is helping to inform other countries to prevent past destructive approaches by the industry from recurring.

The Indonesia coastal program, Proyek Pesisir, supported two key gender studies in Indonesia. The one undertaken as part of a global initiative by Stirling University (U.K.) will result in the development of a diagnostic tool for gender analysis in aquaculture programs. Both studies engaged local NGOs and will have an important impact on understanding the role of women in aquaculture.

The CRM II Mexico project's Normas
Practicas, a manual of **guidelines for low-impact tourism**, was originally designed
as a project-specific tool to help plan for and
mitigate the intense tourism development
pressures along the largely undeveloped
southern stretch of the Costa Maya on the
Yucatan Peninsula. But the effectiveness of
Normas Practicas led to the decision to translate it into English. The Normas help people
recognize the long-term benefits of up-front
thinking and planning to properly design
tourism-related structures in an environ-

mentally friendly manner. The guide is being used to inform tourism development planning in CRM II's East Africa and Indonesia sites, and was used at CRM II's Summer Institute in Coastal Management.

### Creating a New Generation of Coastal Managers

CRM II recognizes that coastal managers must be educated for a profession, and has an established reputation as a leader in training ICM practitioners. The sixth **Summer Institute in Coastal Management** (SI 2000), the project's flagship bi-annual ICM training program, is key to that reputation.

In addition to core topics such as the ICM policy cycle, public participation, coastal issues and practical management tools, the SI 2000 curriculum included greater emphasis on issues of growing interest to USAID and the coastal management



A wide variety of cultures and experiences were represented at the sixth bi-annual Summer Institute in Coastal Management, a month-long course held at URI's Coastal Resources Center in June 2000.

### What is the Impact of Training?

Impact evaluations are being used to assess how well alumni are able to apply what they learned to their own work. Alumni of the 1994, 1996 and 1998 Summer Institutes have been surveyed. Key findings include:

- 85 percent of the respondents were able to put the training to use in their job
  within the first six months, and more than 50 percent were able to do so immediately. Applications included using the CRM II policy cycle as a tool for tracking
  progress of their coastal management project or program; using conflict resolution techniques to resolve user problems more equitably; integrating science and
  management into program design and decisionmaking; and applying techniques
  for more effective communication.
- 82 percent said they had influenced policy or other management decisions related to their coastal program as a direct result of the training.
- 78 percent used the course materials or learning to train others.

These findings will help shape the design of curriculum for future Summer Institutes and provide valuable insights into what is most useful for participants.

profession at large – for example, evaluation and accountability, issues of equity and justice, governance, globalization, and land/freshwater/coastal water interfaces. These issues were taken on from classrooms to public forums to hands-on field project visits and interviews.

SI 2000 also incorporated innovative techniques for learning. A **distance learning component** was piloted during the Tanzania module. A direct, two-way link was made to Dar es Salaam so that CRM II field staff and partners could directly interact with SI participants. Participants made a showcase presentation to key Rhode Island political and environmental

decisionmakers on the future of the Narragansett Bay estuary at the Rhode Island State House. This provided living experience in delivering key ICM messages to politicians, the media and the public. All course material was compiled on CD-ROMs for in-country use and replication by participants.

#### Sharing the Lessons Worldwide

The dissemination of experience, lessons learned, and concepts and tools developed from both field and global activities is a vital part of CRM II's ability to impact ICM planning and implementation across oceans. CRM II strategically distributes reports and information to targeted audiences of coastal management practitioners, government officials and agencies, the USAID and development community, donor organizations, media and the general public, in ways that provide for accessibility and understanding.

CRM II's most-recognizable global information source is the InterCoast Network newsletter. This year's Winter issue focused

on natural disasters with an emphasis on early planning to reduce the impacts of events over which man has no control. The Spring issue focused on land-based sources of pollution – looking at how upland/land-based activities influence river, estuarine and marine environments, which helped to better integrate CRM II and the emerging USAID Water Strategy. The Fall issue contained a reflective and retrospective look at past InterCoast reports and features over the last 15 years, which is linked to the emerging CRM II Learning and Harvest Agenda.

CRM II produced 57 significant **publications** ranging from informational materials and newsletters to high-end publications in FY 00. Publications' distribution and impacts are increased by using CRM II's Rhode Island office to disseminate field project documents to the global community worldwide, while using the field offices to get CRM II information into the hands of key professionals and decisionmakers at the national, regional and local levels. In addition, all major CRM II documents are regularly posted

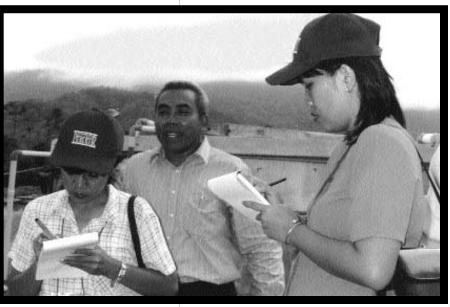
on the CRC Web site (http://crc.uri.edu) with downloading and print-out capabilities for maximum outreach to the ICM audience.

Use of the Internet continues to offer new opportunities to deliver information. CRM II contributed to the development of USAID's

**Intranet site**. and has

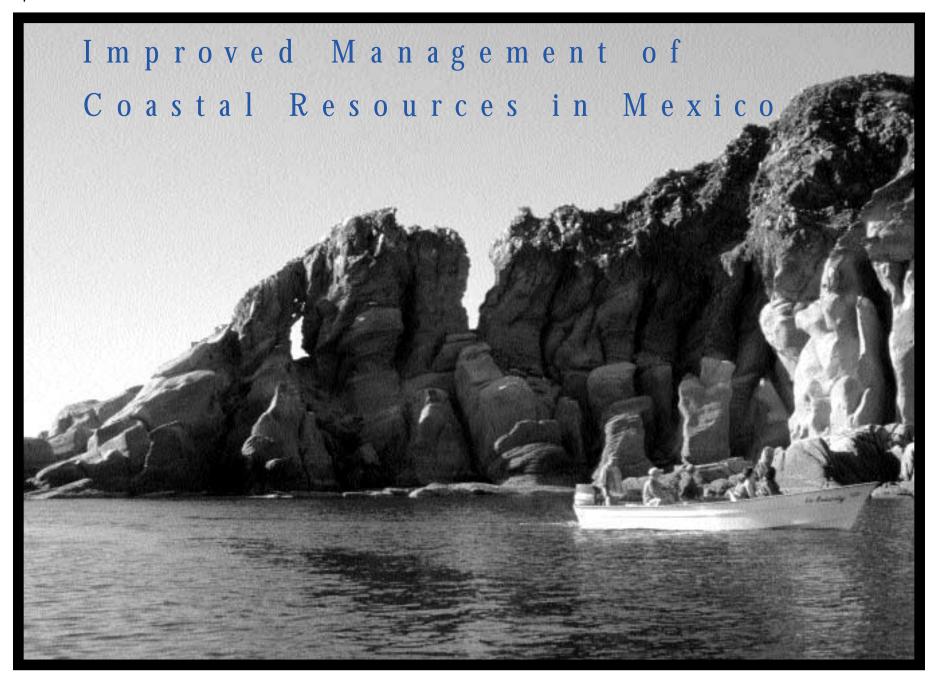
made it easy to connect from the Intranet site to CRC's increasingly popular web site. The CRC-CRM II Web site expanded its links to CRM II partners and colleagues, as well as select ICM Web sites and universities that provide additional resources and information. CRM II has also started to use high-capacity CD-ROMs to capture and disseminate publications.

Finally, CRM II enjoyed very positive and **high-visibility news coverage** during FY 00 at both its field sites and in the U.S.



CRM II communications staff works with journalists worldwide to enhance the coverage of coastal issues through increased knowledge and awareness of the issues.

Whether print, radio or TV, the mass media conduit to the public raises awareness about coastal issues and helps promote community and stakeholder involvement in project initiatives. Positive editorial response to CRM II initiatives in the press also indicated a growing mainstream understanding of CRM II progress and goals.





#### The Project:

The Mexico project, "Conservation of Critical Coastal Ecosystems in Mexico," is a five-year USAID/Mexico-supported initiative to build the capacity for coastal management to conserve Mexico's critical coastal ecosystems. The project works in the State of Quintana Roo and the Gulf of California region.

#### The Partners:

CRM II's primary partners in Quintana Roo are the Amigos de Sian Ka'an A.C. (ASK), the Xcalak Community Committee and the University of Quintana Roo (UQROO). Conservation International/Mexico (CIMEX) is the primary partner in the Gulf of California.

#### The Financing:

FY 2000 financing was \$350,000. Authorized funding through 2003 by USAID/Mexico is \$3,050,000.

he Conservation of Critical Coastal Ecosystems in Mexico project expanded its work in FY 00 to include new projects in the Gulf of California to augment its ongoing work in the Costa Maya in the State of Quintana Roo, on Mexico's Caribbean coast. CRM II also began bringing in new funding and partners, which will, over the next several years, help expand current on-the-ground initiatives.

#### ICM in the Costa Maya

#### **Xcalak**

The highlight of the Mexico CRM II project's year was the declaration of Xcalak's National Marine Park. In June 2000, President Ernesto Zedillo dedicated Xcalak's park during World Environment

#### The Mexican Context

Mexico is undergoing a major political transformation. Decentralization and participatory planning are expected to rise in importance on the nation's political agenda. At the same time, the major forces of economic development are expected to continue and increase, creating both opportunities and ever more pressure on Mexico's critical ecosystems. On both coasts, tourism development continues, and within the Gulf of California, export-oriented mariculture can be expected to put ever-increasing pressure on wetland and estuarine systems.

Coastal management outside of Mexico's system of protected areas is just beginning. And while there are emerging tools and interest in ICM, tangible expressions of what ICM will mean at a significant scale in the Mexican context still need to be developed.



In June 2000, Mexican President Ernesto Zedillo officially declared the Xcalak Marine Protected Area, one of the first National Marine Parks in the country initiated by a community, rather than the federal government. Day celebrations in Cozumel. It became one of the first National Marine Parks initiated by a community, rather than by the federal government. The decree culminated four years of hard work by the community of Xcalak, with support from CRM II. The national endorsement and implementation of a community's own vision of its future represented a major step towards self-management and the promotion of low-impact tourism development along the Costa Maya (rather than the large-scale, mass-tourism development style of Cancun to the north).

The Xcalak National Marine Park includes coral reefs, fringing mangroves, coastal

lagoons and narrow beaches. Part of the Meso-American Barrier Reef ecosystem, the area is rich in marine biological diversity, and is a highly productive breeding and feeding ground for many species of fish, reptiles and nesting turtles, as well as 155 species of birds. Xcalak's experience is a tangible success that others in the Meso-

American Reef region, such as Belize, Honduras and Guatemala, can draw from.

Integrated management efforts in the Xcalak Peninsula have also been driven, in part, by the successful designation of the Marine Park. Community input on the land

zoning ordinance has been accepted by the state to help ensure that the proposed Marine Park and land ordinance are compatible with the vision of lowimpact tourism.

In Quintana Roo, the draft land zoning ordinance for the Costa Maya incorporates over 25 practices verbatim from the low-impact tourism guidelines developed by CRM II in 1998.

#### **Chetumal Bay**

The Chetumal Bay region is a priority site for ICM within Mexico. CRM II is building capacity, raising awareness and increasing commitment, pre-conditions for developing mechanisms for the improved management of Chetumal Bay.

Increased outreach through UQROO is building university and community confidence and capacity to engage government and the private sector in bay planning. With the leadership of ASK and UQROO, the Belize-Mexico Alliance for Management of Coastal Resources has been established, providing the basic framework for collaboration in research, outreach and management of shared waters, including Chetumal

Bay. A new collaboration that links USAID's environmental and democracy-building programs was launched in Chetumal.

At the end of FY 00, UQROO's Student Social Services in Coastal Management project received a national award for its work in Laguna Guerrera and Raudales. The students provided extension to the communities in waste treatment design and application, solar distiller demonstration and community workshops on recycling.

Water and estuary experts from the U.S. will work with Chetumal municipal officials on environmental protection.

#### ICM in the Gulf of California

#### Bahía Santa María

Since 1998, Conservation International/Mexico (CIMEX) has coordinated an inter-institutional effort to advance integrated management of Bahía Santa María. Since

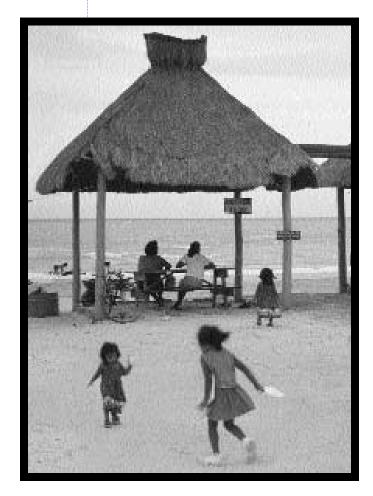
1999, CRM II has supported this initiative and worked with CIMEX to establish Bahía Santa María as a tangible example of integrated resources management of a bay ecosystem. In addition, promising advances

were made in creating the necessary enabling conditions within the State of Sinaloa to foster bay plan implementation, and to utilize the results of this first bay planning process in other locations along the Sinaloa coast.

Early in the year, public officials signed a declaration of support to the Bahía Santa María program, then formed a Conservation and Development Commission to oversee the preparation of a management plan. CRM II has given crucial

Despite making good progress in the protection and management of Chetumal Bay, water quality remains a key issue for local residents and bay users.

support to plan development, providing technical assistance, helping establish a local office, and substantially enhancing both the technical and participatory processes for Bay plan preparation.



CRM II is helping NGOs with work on fisheries management for coastal residents in the local crab industry.



Critical to the sustainable management of Bahía Santa María will be the interaction of fishing, mariculture and tourism sectors in the bay. Using funds leveraged from The David and Lucile Packard Foundation, CRM II is

initiating work with CIMEX and the Sinaloa

#### Bahía Santa María Bay Plan Contents

A preliminary draft Bahía Santa María Management Program was completed in late September 2000, after six community meetings and team workshops were held in Sinaloa over the course of seven months. The Conservation and Development Commission and the project team prioritized the following five key management themes within the plan for Bahía Santa María:

- Hydrodynamics, sedimentation and fresh water input
- Pollution and water quality decline
- Mangrove areas, salt flats and upland forest
- Fisheries productivity and low-impact aquaculture
- Islands management

The draft program incorporates action items for management as well as further study. Recommendations are to be implemented at municipal, state, and national levels.

shrimp farmers to prepare a "good practice" manual for the shrimp industry. The manual will directly build from the USAID/ Latin America and Caribbean-supported work on shrimp mariculture in Honduras.

The State of Sinaloa is also moving ahead with preparation of an environmental master plan for the entire coast. Team members from Bahía Santa María are directly involved in the technical oversight of the project. Results from the estuary project will be incorporated into the master plan and additional site-specific projects will be carried out to implement the findings.

### CRM II-Leveraged Support to Mexico

Given the ambitious goals of the Mexico program, CRM II has worked with USAID and other partners to identify additional support to reach program goals. Over the past year CRM II has leveraged over \$385,000 in additional funds from USAID, The David and Lucile Packard Foundation and the Government of Japan, which will help support the implementation of FY 01 activities. CRM II's Mexican partners also provide significant resources in terms of staff and project resources.

#### **Leveraged Funds for FY 01**

USAID/Mexico - Democracy/Environment Linkages in Chetumal	\$66,000
USAID/Institutional Partnership in Higher Education – GIS Development in Quintana Roo	\$100,000
Government of Japan – Mahahual Station	\$85,000
USAID/Mexico Mahahual Station Complementary Funding	\$50,000
USAID/South-South Cooperation – Belize-Mexico Alliance Workshop	\$20,000
USAID/South-South Cooperation - Community Guide Exchange in Belize	\$8,000
The David & Lucile Packard Foundation – Promote Good Shrimp Practices in Bahía Santa María	\$34,000
USAID/LAC – Extension of Good Shrimp Practices to Mexico	\$22,000
Total Leveraged Funds	\$385,000



Its great biodiversity makes the Gulf of California a prime choice for ICM efforts.



CRM II's work on good management practices, including monitoring of shrimp size and feed, is assisting both the industry and communities in Latin America.

hrimp mariculture has been a major coastal issue in Latin America and the Caribbean (LAC) for over two decades. The most important environmental concern of shrimp farming is the impact of pond siting on fragile ecosystems. Some aquaculturists in the shrimp industry have used environmentally damaging techniques such as the clear-cutting of mangroves to build ponds. Additional concerns include conflicts with other resource users, such as fishermen, and the environmental impacts of poor pond operation.

Responding to that situation, CRM II has been actively promoting good management practices (GMPs) for the shrimp mariculture industry in the LAC region. The development of sustainable shrimp mariculture GMPs for Honduras is in the final stages of development. Working closely with scientists, industry members and environmental managers, the GMPs are based on both technical and detailed field survey results and are tailored specifically for shrimp mariculture in Honduras. Most, however, will be applicable



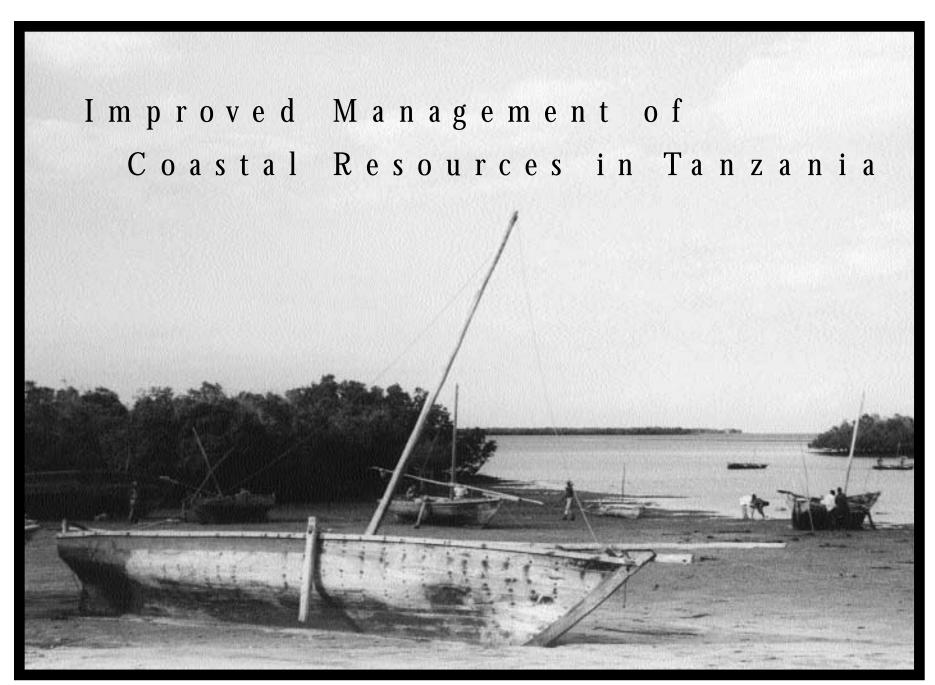
Shrimp mariculture produces many economic opportunities, but done improperly, it can have negative impacts on mangroves, water quality and the entire ecosystem.

throughout Latin America and of interest wherever mariculture is being practiced.

This work expands on the agenda-setting CRM II publication, Maintaining A Balance: The Economic, Social and Environmental Impacts of Shrimp Mariculture in Latin America, a comprehensive overview of the industry published in 1998. (Both reports are available in English and Spanish.). The Honduras GMPs demonstrate how to move from generic codes of practice prepared at the international level to detailed good management practices applicable to and accepted by specific

regional industries. The Latin America aquaculture experience is also helping to inform similar efforts being carried out in Tanzania and Indonesia, exemplifying the value of CRM II cross-project information-sharing and learning.

The GMP work is being built upon through follow-on and additional activities in Central America and Mexico supported by the USAID/LAC Bureau, the United States Department of Agriculture and The David and Lucile Packard Foundation.



The TCMP's work in Tanzania has included national policy development, as well as bringing together local field projects such as in this area of the north coast in Tanga.



#### The Project:

The Tanzania Coastal Management Partnership (TCMP) was established in 1997 with support from USAID/Tanzania. It is designed as a five-year project, extending through 2001. The TCMP's goal is to establish the foundation for effective coastal governance.

#### The Partners:

CRM II's primary partner is the vice president's office, through the National Environment Management Council (NEMC). Together, CRM II and NEMC established the TCMP and a small support unit to provide day-by-day facilitation and coordination. The TCMP support unit works closely with issue-based, multi-sectoral working groups, the network of existing ICM programs and projects, and the private sector.

#### The Financing:

FY 2000 financing was \$1.2 million. Authorized funding through 2001 from USAID/Tanzania is \$3.47 million.

he TCMP, working closely with the highest levels of government, continues to move the country closer to adopting a national coastal management policy, which will be one of the first to be adopted in East Africa. By the end of September 2000, the policy had been approved by the vice president's office and moved on to await final approval from the Tanzania Cabinet. Steps towards formal adoption will begin in early 2001.

The TCMP's main engine for developing the national policy and program documents is its multi-sectoral Core Working Group. This team produced the Green Paper that presented options for a national coastal management policy. The Green Paper was vetted at the high-level Third Director's Meeting in November 1999.

#### The Tanzanian Context

Tanzania, though one of Africa's poorest nations, is enjoying economic growth and political stability. However, people on the coast are not yet benefiting from the current economic expansion, and they are getting poorer. Dependence on resources is paramount to survival for coastal families, yet the condition of those resources is degrading.

The nation's governance is changing. Decentralization and downsizing of government is proceeding. Within this context, ICM can play an important role – it can demonstrate how to successfully devolve decisionmaking power from the center to the local level, and how to integrate across sectors.

Members of the Tanzania Parliament representing coastal constituencies, regional administrative secretaries, district commissioners, district executive directors, district function officers, directors, and national sectoral agencies attended the meeting. This was the first time such a diverse group of decisionmakers came together to review a policy, and that central and local government worked together to write specific policy statements and select implementation strategies. Meeting participants endorsed the findings of the Green Paper and recommended a policy implementation strategy. They also indicated that this first-time process should serve as a model for future policy discussions.

From the Green Paper, the core group developed a White Paper, which contains all the elements of a draft policy/program. It bridges the more technical Green Paper to an actual working policy and program alignment. The White Paper was submitted for a 30-day public review in December 1999, and was accepted by the vice president's office in early 2000.

### Connecting Science to Management

In July 1999, the TCMP established a Science and Technical **Working Group** (STWG). This group is the primary bridge between coastal managers and the science community studying coastal and marine issues at local and national levels. The STWG will provide advice and guidance to the National Coastal Programme on scientific questions, studies, data management, and monitoring necessary to improve the scientific foundation for coastal management.

In FY 00 the group completed a number of important reference publications for resource managers, marine scientists, politicians, university graduate students

and anyone (local and international) concerned with marine sciences in Tanzania. These documents, now available in hard copy at key locations in the country, are the most complete and comprehensive collection on the subject of marine science available in Tanzania.

# A Foundation of Scientific Information

The TCMP's Science and Technical Working Group compiled reference publications on marine science in Tanzania, including:

- A directory of marine scientists working in Tanzania
- A reference location guide for marine science literature on Tanzania
- An annotated bibliography of selected marine science literature
- Syntheses of the current state of scientific knowledge on key coastal issues
- Summaries of coastal ecosystems

### Mariculture as an ICM Focus

Using the wellreceived Tanzania Mariculture Issue Profile as a steppingoff point, the intersectoral Mariculture



New permitting guidelines for mariculture development, a major economic opportunity for the coast, have been created by the TCMP's MaricultureWrking Group.

Working Group prepared mariculture guidelines for regulators and investors. These guidelines outline the first intersectoral review process for a major economic use of the coast in Tanzania. They are a tangible expression of the proposed national coastal policy, demonstrating the ability of multiple sectors to work together. They will provide an important model for other sectors. The guidelines are divided into two major parts – steps in a streamlined permit process, and decision criteria for each sector involved in the permit process. The guidelines were presented and reviewed at

a Directors Meeting in January 2000 which was attended by over 30 representatives from key agencies and organizations, including the private sector. The guidelines are now being adopted by each of the sectoral agencies involved in the mariculture permit process.

### Capacity Building Locally and Regionally

The TCMP provides its partners ample opportunity for learning by doing, augmented, where appropriate, by short courses both inside and outside Tanzania. During FY 00, training was provided to over 77 participants from 11 different government institutions. Training introduced the candidates to a range of coastal management experience from around the world, broadening their view about how to address difficult intersectoral management issues.

TCMP staff worked with the Western Indian Ocean Marine Science Association's (WIOMSA) regional capacity-building effort to assess human capacity-building needs in Tanzania. This information will inform WIOMSA's planned region-wide training program. Tanzania's experience will be a prominent feature in the training program.

#### National Leadership

The TCMP has formed a unique partnership among the other coastal management

The village communities are taking full responsibility for monitoring dynamite fishing. We have given them power and they are making sure dynamite fishing does not resurface again.

-Mtwara District Commissioner Fatuma Mikidadi, Voices from the Coast

projects – funded by a range of different donors – working in Tanzania today. Through semi-annual retreats, regular communication vehicles and servicedriven interaction, all of the coastal programs are learning from one another, and sharing expertise, information and ideas. In addition to program-to-program networking, they provide key inputs to the national policy, bringing on-the-ground results and experiences to the proposed implementation structures and systems.

The TCMP continues to help new ICM programs initiate their work. Support was provided to a new coastal management initiative in the district of Kunduchi, funded by the Swedish International Development Cooperation Agency, and a small project in Kilwa funded through a Pew Charitable Trust Fellowship.

### Raising Public Awareness and Involvement

During FY 00, the TCMP's outreach strategy focused on national agency directors and permanent secretaries whose support is necessary to gain approval for the new ICM national policy. CRM II's work included one-on-one meetings with key directors, and the distribution of the video, Voices from

#### Bringing Groups Together

Coastal programs in Tanzania are funded by multiple donors, including Irish Aid, Finnida, The Royal Netherlands, and the Swedish International Development Cooperation Agency, and backstopped by multiple NGOs including the World Wide Fund for Nature and IUCN: The World Conservation Union. Through the TCMP, Tanzania has avoided the usual trap of different programs working in isolation of, or competing with, each other.

the Coast, which features coastal residents and community leaders discussing in their own words the problems and challenges they face in striving for successful, locally beneficial coastal management. Voices from the Coast was distributed to key coastal members of Parliament, the vice president's office, and all regional and district commissioners from the coast. It has also been



Local children perform at the Coastal Environmental Awards Scheme celebration. Schools, civic groups, municipalities, and individuals provided the 21,000-plus participants in a successful awareness-raising program in six coastal districts.

distributed to select coastal management communications outlets worldwide, as a model of how to bring coastal issues front and center at the highest levels of government.

Distribution of the TCMP newsletter, Rwani Yetu (Our Coast), printed in both Kiswahili and English, also helped raise awareness about the national ICM policy and the issues it seeks to address. Finally, an E-mail list serve, E-Pwani, continued to be an effective information exchange in the region and for CRM II headquarters in the U.S.

The TCMP cooperated with USAID's environmental education project, GreenCOM, to organize its second annual local Coastal Environmental Awards Scheme (CEAS). The CEAS is used to help local programs raise awareness and promote environmentally sound activities. Committees were formed in the

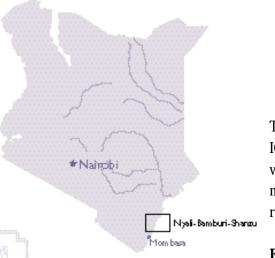
coastal districts of Tanga, Pangani, Muheza, Mtwara, Lindi and Mafia, and thousands of civic organizations, government agencies, schools and individuals took part. During the awards ceremony in July 2000, the contest reached over 21,000 people. Ceremonies were officiated by district and regional political leaders, and generated substantial news coverage throughout the country. Funding for the prizes – bicycles, watering cans and rubber boots – was secured by TCMP and GreenCOM from a number of local organizations.

#### Winning CEAS Activities from Schools, Groups, Individuals, Institutions

- Tree planting/tree nursery establishment
- Environmental/surroundings cleaning
- Soil conservation
- Promotion of good agricultural practices use of organic fertilizers/animal husbandry
- Vegetable growing
- Solar use
- Marine resource conservation mangrove planting
- Seaweed farming
- Raising of public awareness through various activities – songs, plays, public talks, etc.
- Flower gardening/landscaping
- Seed preparation/seedling distribution
- Agro-forestry
- Fish culture
- Handicrafts
- Beekeeping



CRM II is building a network among existing ICM site projects, including Malindi.



#### The Project:

CRM II's Kenya project continues to support and provides technical assistance to the Nyali-Bamburi-Shanzu area coastal management effort, while building the foundation for a broader-based program.

#### The Partners:

The multi-agency Kenya Coastal Management
Steering Committee Secretariat, housed at the
Coast Development Authority (CDA), is CRM II's
primary partner. This is augmented by a partnership
with Kenya's National Environment Secretariat.

#### The Financing:

FY 00 financing was \$120,000.

RM II, working with the USAID/ Kenya mission and its partners, spent much of the year reassessing CRM II ICM strategies for Kenya. Field trips were made to ongoing ICM project sites and/ or sites to which ICM could be extended. The team reviewed the current context for ICM in Kenya and assessed the strengths and weaknesses of USAID-supported coastal management activities since 1994. From this review, a two-point strategy has emerged:

Expand and sustain community impacts of ongoing work by completing improvements to Jomo Kenyatta Beach within the Nyali-Bamburi-Shanzu site.

The Jomo Kenyatta Beach area is the sole place along Mombasa's North Beach area where local residents and artisanal fishermen can have free access to the beach. An early CRM II action in governance secured the land for the public and improved the site itself. Freshwater is now available, as well as a modest banda for fishermen to land and clean their fish, and tour boat operators to store their gear. Plans are underway to pave the parking area, install a water-catchment system and create a tourist market place. CRM II also worked with the CDA to complete an annual progress report that captures the lessons of the pilot site.

### The Kenyan Context

Political structures in Kenya are under considerable pressure. The regulatory structure for the coast and its resources is complex. Competition, rather than cooperation, characterizes many interactions among government, private volunteer organizations and NGOs about intervention and financial resources for coastal activities.

There is nonetheless cause for optimism. The Kenya press is noticeably freer than in the recent past. Popular demand for improved natural resources management and better governance is growing. At local levels, interest is increasing for participating in and benefiting from the wise use of resources.

### Build a foundation for a national ICM Program

CRM II is beginning to move from site planning to a national coastal initiative by building a network among existing site projects and generating key information. With the help of the Ministry of Environment and Natural Resources, activities are beginning to raise awareness of key decisionmakers about the importance of the coast. A coastal management newsletter and an E-mail discussion group, E-Kenya Coast, were established to increase exchanges among coastal activities.



CRM II is reaching out to countries such as Mozambique to help build in-country capacity to effectively deal with increasing pressures on the coastline.

#### The Project:

The goal of the CRM II capacity-building program is to increase the numbers of trained and experienced coastal practitioners in the Western Indian Ocean region and strengthen the Western Indian Ocean Marine Science Association's (WIOMSA) ability to deliver high-quality capacity-building programs.

#### The Partners:

Western Indian Ocean Marine Science Association

#### The Financing:

FY 00 financing was approximately \$225,000 of \$450,00 authorized through FY 01. Funding is provided by USAID/Regional Economic Development Services Office-East and South Africa (REDSO-ESA).

ecognizing the need for indigenous ICM capacity building in the region to advance coastal management, CRM II joined with WIOMSA to create a new and innovative approach to region-wide capacity building.

The first step in this process was an assessment of ICM capacity-building needs to

identify ongoing coastal management capacity-building activities; gaps in skills, knowledge and attitudes of ICM practitioners; and potential partner institutions for WIOMSA. The skills of "an ideal coastal manager" were postulated based on CRM II experience and a review of the current literature. Four broad areas were identified: technical skills, ICM practice knowledge, professional skills and project/program management skills.

An assessment tool was developed to determine areas of strengths and weaknesses for ICM practitioners across the region. Four countries (Kenya, Tanzania, Mozambique and Madagascar) were visited. Information about practitioners in other WIO countries was obtained from surveys, literature and personal communication. Members of the donor community. USAID missions, the United Nations Development Program and its Environmental Programme, and the Danish, Swedish and Finnish development agencies were also interviewed. Mini-workshops were held in Kenya, Mozambique and Tanzania for practicing coastal managers

to assess their training needs and to provide a brief introduction to CRM II's approach to coastal management.

Responses were consistent: short-term technical training is helpful and necessary; additional capacity needs to be built in areas related to project management and professional skills; and, there is an opportunity and need to learn from the WIO's emerging ICM repertoire. Early next year WIOMSA and CRM II will launch a year-long program – "Learning and Performing: Developing Skills for Coastal Management Practitioners" to respond to these needs.

Assistance from CRM II is also helping WIOMSA emerge as a major indigenous group actively working to support a new generation of coastal managers. With funding from REDSO-ESA, CRM II helped WIOMSA restructure the organization, creating a capacity-building unit. CRM II also facilitated USAID support for strategic planning assistance and institutional strengthening in the area of information technology.

# Improved Management of Coastal Resources in Indonesia

The community-based Blongko Marine Park on the Sulawesi Sea (in background) has become a regional and national model for marine protected areas, and is now seeing a tangible increase in local fisheries production.

#### The Project:

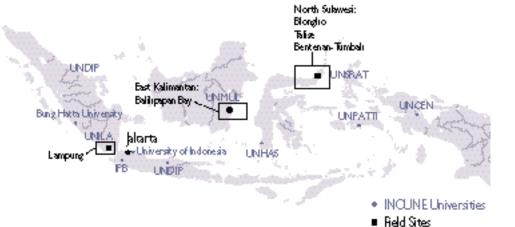
Proyek Pesisir (Indonesian Coastal Resources Management Project) is part of the USAID/ Indonesia Natural Resources Management Program. Its objective is to decentralize and strengthen coastal resources planning and management.

#### The Partners:

The Directorate-General for Coastal, Beaches and Small Island Affairs in the Ministry of Marine Affairs and Fisheries (M/MAF) and the National Development Planning Board (BAPPENAS) are the principal executing agencies for *Proyek Pesisir*. The project works with numerous government and non-government partners at field sites. Dayto-day coordination of the national program is integrated with M/MAF, the Centre for Coastal and Marine Resources Studies (CCMRS) at the Bogor Agricultural Institute (IPB), the Indonesian Coral Reef Foundation (Yayasan Terangi) and the USAID Natural Resources Management (NRM) program secretariat.

#### The Financing:

USAID funding for FY 2000 activities totaled approximately \$1.8 million. *Proyek Pesisir* was able to leverage additional outside resources from counterparts and foundations that increased the program's resources by approximately 25 percent. Authorized USAID life-of-project funding through 2003 is \$14.2 million.



role in the development of good practices and coastal management models at the local scale, and in development of national policy that will ultimately support the establishment of a coherent

national ICM program. Building on three years of investment by USAID, Government of Indonesia, university and NGO and community partners, Proyek Pesisir is harvesting the experiences and lessons from both in-country and global

## The Indonesian Context

Indonesia is struggling to emerge from an economic depression as well as social and political turmoil that has marked the transition from the New Order Government to the "reformasi" era. It has recognized that development of a civil society, as well as broader economic recovery in Indonesia, requires the development of more equitable, transparent and sustainable approaches to the utilization of natural resources.

In October 1999, when then newly elected President Abdurrahman Wahid announced his new Cabinet, one of his most radical innovations was to establish the Ministry of Marine Affairs and Fisheries. This is a watershed in the history of this archipelagic nation, and symbolizes a markedly increased level of recognition of the social, economic and ecological significance of Indonesia's marine and coastal resources. At the same time, Indonesia's Congress passed Law 22/1999 that devolved authority for management of nearshore waters to the provinces out to 12 miles.

## Building Capacity for Learning

Following some two and a half years of mentoring support from CRM II staff and consultants, the five-person Centre for Coastal and Marine Research Studies of Bogor Agriculture Institute's Learning Team is increasingly engaged in documenting and analyzing Indonesia's coastal management experience. The team conducted the second national coastal learning workshop in March 2000, has started work with new partners to develop a cross-portfolio learning approach and is beginning to assist in development of the national coastal policy initiative.

CRM II initiatives to help solve Indonesia's increasingly high-profile coastal issues.

In recognition of the new opportunities for coastal management governance reform, and in view of the unique position of Proyek Pesisir, a revised and extended project strategy was developed in consultation with USAID and key partners. Over the next three years, emphasis will be to institutionalize and extend ICM good practices at the local level, and considerably strengthen the program's national track.

# Field-based Research and Learning

In the North Sulawesi and Lampung field programs, formal recognition was given by authorities to management plans that have been under development for some two years. In North Sulawesi, the Minahasa Regency formally approved three villagebased management and develop-

ment plans prepared by project partners with the support of village extension officers. They are widely recognized as models of good village governance.

In Lampung Province, the widely acclaimed Lampung Coastal Atlas process led into the development of a provincial coastal strategic plan. The planning process involved over 990 key stakeholders. The 80 meetings held to gain stakeholder input, reaction and support attracted extraordinary media coverage: two feature documentaries on coastal resources management were produced on the national television station, TVRI, monthly radio broadcasts were

Balikpapan Bay in East Kalimantan's mix of logging, heavy industry and fisheries present challenges for use of the estuary which can be effectively balanced by the area's new bay management plan.



arranged with RadioRI, and the Lampung Post presented bi-weekly reports of key issues and progress. Most importantly, as a result of the work of the steering committee for the plan, provincial agencies in Lampung are "buying in" to plan implementation – nearly \$200,000 has been allocated from the provincial budget for the first year of activities, an unprecedented commitment to ICM by an Indonesian provincial authority.

In East Kalimantan, development of a profile for Balikpapan Bay (and watershed) is now well advanced. A full draft plan will be released next year.

# The National Coastal Policy Initiative

With the establishment of the Ministry of Marine Affairs and Fisheries, Proyek Pesisir has seized an unprecedented opportunity to contribute to development of a national coastal policy and program. From the early days of establishment of the ministry, Proyek Pesisir staff have been actively supporting Minister Sarwono Kusumaatmadja and his senior staff in the following ways:

- Identified key staff to be recruited and developed ministry position statements and initial organizational structures
- Developed monthly briefing notes on key issues and developments in fields related to coastal and marine resources management to be considered in formulation of ministry policies and programs
- Established forums where the minister and his senior staff can learn about local concerns and program support needs
- Convened working groups and national committees to support the implementation of marine and coastal aspects of Law 22/1999 on Regional Autonomy, particularly in relation to determining the boundaries of national, provincial and local jurisdictions
- Supported the development of a national marine research agenda through representation on the National Research Council
- Facilitated field-based dialogues between Proyek Pesisir's local partners and key ministers so that they can be better informed about the significance of coastal resources and the needs of coastal communities. For example, in a two-week period in July, the Lampung field program hosted visits by the minister and the vice-president and then a further visit by the minister accompanying the president
- Conducted a study tour to the U.S. for the minister, four senior national officials and three senior provincial officials. The tour involved meetings with key U.S. agencies and experts in Washington DC, Florida, Rhode Island and Washington State, and resulted in two Memoranda of Understanding and a Letter of Intent to support cooperation with U.S. agencies. During the tour to the nation's capital, the minister met with the head of the National Oceanographic and Atmospheric Administration, among other top government officials, and presented a public lecture on Capitol Hill.

Dr. James Baker, administrator of the National Oceanic and Atmospheric Administration meets with Minister Sarwono Kusumaatmadja of Indonesia's new Ministry of Marine Affairs and Fisheries in Washington, D.C.

#### **Institutional Strengthening**

With support from The David and Lucile Packard Foundation, a strategy for the

Indonesian Coastal University Network (INCUNE) was completed. Developed by representatives from the 11 network universities, the strategy outlines how

INCUNE members will work together to build experience and capacity, including links with the activities of the IPB-based learning team. A network prospectus has been launched to enable international and Indonesian agencies to engage with INCUNE.

# Increased Capacity Through Education and Training

Proyek Pesisir's extensive training programs continued in FY 00 with an additional 10,010 persons (2,511 female) trained, bringing to 19,627 (5,402 female) the total number of persons trained since the project began.

The first national Training of Trainers course conducted by CCMRS/IPB in Bogor for NGO and university partners in March 2000 emphasized development of standardized and complete training reference materials, and a more selective approach to participant selection and engagement. A new partnership was also initiated with the newly established Indonesian Coral Reef Foundation. Staff from all sections of the foundation, including administration and finance staff, are working alongside Proyek Pesisir and CCMRS/IPB counterparts to "learn by doing."

# Improved Policy and Enabling Conditions

Proyek Pesisir's policy activities are now focused at the national level and USAID/Indonesia has provided additional dedicated support for that purpose. As a consequence of the rapid decentralization schedule, provincial, district and local partners of Proyek Pesisir are also seeking increased policy assistance. The Proyek Pesisir policy team is working with field program staff and partners to support these needs, however the needs are greater than current capacity. Proyek Pesisir is thus coordinating activities closely with other USAID programs (notably Democracy and Local Government, and the US-Asia Environmental Partnership) to support coordinated capacity building of local parliaments and governments.

#### Dissemination of Lessons Learned

Proyek Pesisir continues to be a major source of new information for Indonesians on coastal resources and management, producing 137 publications in FY 00, to run the project's overall total to 425. Most notable amongst these have been the special publications such

as the North Sulawesi Village Plans, the Lampung Atlas and Coastal Strategic Plan. More than 11,000 copies of project publications were distributed to project partners in Indonesia and globally. Since it is Proyek Pesisir's policy to emphasize production of publications in Bahasa Indonesian, relatively few publications are available in English.

Proyek Pesisir also leverages CRM II impact through interaction with other important coastal programs both in Indonesia and the region. Project staff continue to be invited to share their experience at key forums and in high level briefings. For example, Proyek Pesisir staff were invited to brief the president at the launch of the National Save Our Coral Reefs Now program; UNESCO is attempting to follow Proyek Pesisir methodology in the design of their Jakarta Bay program; the Asia Development Bank is actively seeking Proyek Pesisir guidance in the design of its major Indonesia marine and coastal management project; and the Japanese International Science and Technology Federation chose to partner with Proyek Pesisir's field program in Lampung for a series of ocean fertilization experiments.

### The National Coastal Conference and Awards

The second national coastal conference, Konas II, was held in Makassar, South Sulawesi in May 2000. Some 650 delegates registered for the event, including more than 60 foreign delegates. The organizing committee was chaired by representatives of Hasanuddin University and supported by provincial and national agencies and NGOs. The conference allowed for unprecedented discussions among the many coastal stakeholders in Indonesia.

A high point of the conference was the presentation of the first-ever National Coastal Awards by the Minister for Marine Affairs and Fisheries and CRC's Associate Director. These awards were sponsored by the University of Rhode Island.

**National Excellence Award (Individual): Haji Mohammad Thayeb** for his long-term commitment to restoring the health of the coastal areas of Tongke Tongke village in South Sulawesi by rehabilitating and expanding its mangrove forests.

**National Coastal Merit Awards (Individual): William Moka**, a lecturer at Hasanuddin University, an expert in coral reef ecology; and **Rili Djohani**, a coastal and marine advocate who has worked for major environmental organizations on grouper aquaculture programs, ecotourism development and to combat destructive fishing practices.

**National Excellence Awards (Institution): PT Bali Cruises Nusantara** for incorporating coastal and marine conservation education and community action into its many tourist services.

**National Coastal Merit Awards (Institution): Lampung Provincial Government** for dramatic strides in "bottom-up" participatory planning; **Blongko Marine Sanctuary Management Group** for creating the first community-run marine sanctuary in Indonesia; and **Kurma Asih Protection Group** for establishing a successful turtle hatching and release program.





Monitoring and evaluating the impacts of coral bleaching, and other threats to coral reefs and the coastal residents whose lives depend on them, has been a focus of CRM II's work in Asia.

SAID's pioneering assistance to coastal management initiatives in Asia began in the mid-1980s and continues today. The significance of coastal resources to the well-being of Asia's people, as well as the region's enormous importance for biodiversity, is becoming more widely recognized by other donors and the nations themselves. Although programs are rapidly multiplying. USAID remains the donor with a "cutting edge" portfolio. This allows CRM II to influence the much larger development bankfinanced projects as well as the increasing investments of U.S. private foundations.

#### **Coral Bleaching Impacts**

In 1998, there was a major coral bleaching event throughout the Pacific and Indian Oceans. While substantial attention was directed at documenting the bleaching event and its biological impacts, little was being done to ask the next question: If the coral is bleached and dies what happens to the fish and fishermen who depend on reef fisheries? And what will be the impacts on dive tourism? Will tourists still go to

resorts where coral is bleached? With funds from the East Asia and Pacific Environmental Initiative, CRM II supported a meeting of experts to address these and other ques-

tions and make recommendations to the Conference of the Parties of the Convention on Biodiversity. A small number of studies were also commissioned, such as documenting ecological and socioeconomic impacts of the 1998 mass coral bleaching event at two locations in the Philippines – Palawan, an important dive tourism center; and Bolinao, a reefdependent fishing community. Also, a CRM II partner, Reef Check, was able to quickly assess the ecological impact of a coral bleaching episode in Fiji that occurred earlier in 2000.

#### Success Factors for Sustainability of Community-based Marine Protected Areas

Important lessons are emerging from CRM II's extensive research in the Philippines. Methods include focus group meetings on community-based coastal resources management and collection of data at 45 community-based marine protected areas there.

Communities more likely to successfully establish and sustain community-based marine protected areas are:

- Communities with smaller population sizes
- Communities where there is a perceived crises in fisheries resource abundance prior to the start of the project

The marine sanctuary is more likely to be successful if:

- Successful alternative income generation projects are part of the planning process
- Community participation in decisionmaking is high
- Ongoing and continuing advice is provided to the community
- Inputs are made by local government

#### Marine Protected Areas

The creation of small-scale, locally managed coral reef protected areas (areas where no fishing is allowed) is an important tool for reef-dependent villages throughout Asia. The Philippines has the most experience in using this tool. While on-site success (such as more fish, better coral cover) has been documented in multiple locations, their successful, wide-scale replication has often proved elusive. With supplementary funding from The David and Lucile Packard Foundation, CRM II has been using quantative and qualitative research to better understand what factors are most critical for success.

#### Selected Publications

#### Global

Coastal Resources Management Project II 1999 Results: Increasing Conservation and Sustainable Use of Coastal Resources. 2000. Coastal Management Report #2222. Coastal Resources Center. Narragansett, RI.

Coastal Resources Center Prospectus 2000. 2000. Coastal Resources Center. Narragansett, RI.

The Common Methodology for Learning: Ecuador's Pioneering Initiative in Coastal Management. S. Olsen. 2000. Coastal Management Report #2227. Coastal Resources Center. Narragansett, RI.

Educating for Governance of Coastal Ecosystems: The Dimension of the Challenge. S. Olsen. 2000. Ocean & Coastal Management 43: 331-341.

Catalyzing Coastal Management in Kenya and Zanzibar: Building Capacity and Commitment. L.Z. Hale, M. Amaral, A. S. Issa and B.A.J. Mwandotto. Coastal Management 28: 75-85. What are We Learning from Tropical Coastal Management Experiences? S. Olsen and P. Christie. Coastal Management 28: 5-18.

Newsletters/Global

InterCoast Network #35.
Natural Disasters. Pamela Rubinoff,
Theme Advisor. Winter 2000.

InterCoast Network #36. Land-based Sources of Pollution. Richard Volk, Theme Advisor. Spring 2000.

InterCoast Network #37. Reflective and Retrospective: 1986 - 2000. John R. Clark, Theme Advisor. Fall 2000.

#### Mexico

Dos Communidades, Un Ecosistema Diagnostico Comunitario de Laguna
Guerrero y Raudales (Two Communities,
One Ecosystem - Community Profile of
Laguna Guerrero and Raudales).
R.R. Romero. May 2000.
University of Quintana Roo.
Quintana Roo, Mexico.

Visiones sobre el Futuro de los Recursos Naturales de las Communidades de Laguna Guerrero y Raudales, Quintana Roo (Vision for the Future of the Natural Resources in Laguna Guerrero and Raudales). December 1999. University of Quintana Roo. Quintana Roo, Mexico.

Newsletters/Mexico

Manejo Integrado de Recursos Costeros (MIRC). Year One: Numbers 1 and 2. Quintana Roo, Mexico.

#### Indonesia – Proyek Pesisir

Integrated Coastal Marine Management Enters a New Era in Indonesia. R. Dahuri and I. Dutton. Integrated Coastal Management. Volume 1: 11-16.

Best Practices Guide for Crown-of-Thorns Clean-ups. N.B. Fraser, B.R. Crawford and J. Kusen. 2000. Proyek Pesisir Special Publication. Coastal Management Report #2225. Coastal Resources Center, University of Rhode Island. Narragansett, RI, USA. Assessing Behavioral Aspects of Coastal Resource Use. R. Pollnac and B. Crawford. 2000. Proyek Pesisir Special Publication. Coastal Management Report #2226. Coastal Resources Center, University of Rhode Island. Narragansett, RI, USA.

Rencana Strategis, Pengelolaan Wilayah Pesisir Lampung (Strategic Plan, Lampung Coastal Area Management). 2000. Pemda Propinsi Lampung. Kerjasama Pemerintah Daerah Propinsi Lampung dengan Proyek Pesisir Lampung and PKSPL-IDB. Bandar Lampung, Indonesia.

Indonesian Journal of Coastal and Marine Resources. Vol. 3(1). Jakarta, Indonesia.

Penganalan Dan Pengelolaan Ekosistem Mangrove (Technical Guidelines for Managing Mangrove Ecosystems). D. Bengen. 1999. Pusat Kajian Sumberdaya Pesisir dan Lautan, Institut Pertanian Bogor. Bogor, Indonesia. Rencana Pengelolaan Daerah
Perlindungan Laut dan Pembangunan
Sumberdaya Wilayah Pesisir Desa
Blongko (Management Plan for the
Marine Sanctuary and Development of
Coastal Resources in Blongko Village).
M. Kasmidi, A. Ratu, E. Armada,
J. Mintahari, I Maliasar, D. Yanis,
F. Lumolos, N. Mangampe,
P. Kapena and M. Mongkol. 1999.
Coastal Resources Center, University of Rhode Island, Narragansett,
Rhode Island, USA; and BAPPEDA,
Sulawesi Utara. Indonesia.

Rencana Pembangunan dan Pengelolaan Sumberdaya Wilayah Pesisir Desa Talise (Coastal Resources Development and Management Plan for Talise Village). N. Tangkilisan, V. Semuel, V. Kirauhe, E. Mungga, I. Makaminang, B. Damopolii, W. Manginsihi, S. Tompoh and C. Rotinsulu. 1999. Coastal Resources Center, University of Rhode Island, Narragansett, Rhode Island, USA; and BAPPEDA, Sulawesi Utara. Indonesia. Profil serta Rencana Pembangunan dan Pengelolaan Sumberdaya Wilayah Pesisir Desa Bentenan and Desa Timbak (Coastal Resources Profile and Development Management Plan for Bentenan and Timbak Villages). Petugas Lapangan and Wakil Masyarakat. 1999. Coastal Resources Center, University of Rhode Island, Narragansett, Rhode Island, USA; and BAPPEDA, Sulawesi Utara, Indonesia.

#### Asia

Community-based Marine Sanctuaries in the Phillipines: A Report on Focus Group Discussions. B. Crawford, M. Balgos and C.R. Pagdilao. Coastal Management Report #2224. PCMARD Book Series No. 30. Coastal Resources Center, University of Rhode Island. Narragansett, RI, USA; and Phillipines Council for Aquatic and Marine Research and Development, Los Banos, Laguna, Phillipines.

#### Tanzania – Tanzania Coastal Management Partnership

Options for a National Coastal Management Policy: Green Paper. TCMP Support Unit. 1999. Working Document #5026. TCMP. Dar es Salaam, Tanzania.

Proposed National Coastal Management Policy: White Paper. TCMP Support Unit. 1999. Working Document #5028. TCMP. Dar es Salaam, Tanzania.

Mariculture Guidelines Source Book. TCMP Mariculture Working Group. 2000. Working Document #5030. TCMP. Dar es Salaam, Tanzania.

Annual Self Assessment Report. TCMP Support Unit. 2000. Working Document #5034. Dar es Salaam.

Directory of Marine Scientists Wrking in Tanzania. TCMP Science and Technical Working Group. 2000. Working Document #5036. TCMP. Dar es Salaam, Tanzania

Reference Location Guide for Marine Science Literature in Tanzania. TCMP Science and Technical Working Group. 2000. Working Document #5037. TCMP. Dar es Salaam, Tanzania.

Annotated Bibliography Based on Marine Science Literature in Tanzania. TCMP Science and Technical Working Group. 2000. Working Document #5038. TCMP. Dar es Salaam, Tanzania.

Summary of Coastal Ecosystem Profiles for Tanzania. TCMP Science and Technical Working Group. 2000. Working Document #5039. TCMP. Dar es Salaam, Tanzania.

Newsletters/Tanzania

Rwani Yetu. The TCMP Newsletter. Issues No. 005-009, November 1999-July/August 2000. Dar es Salaam, Tanzania.

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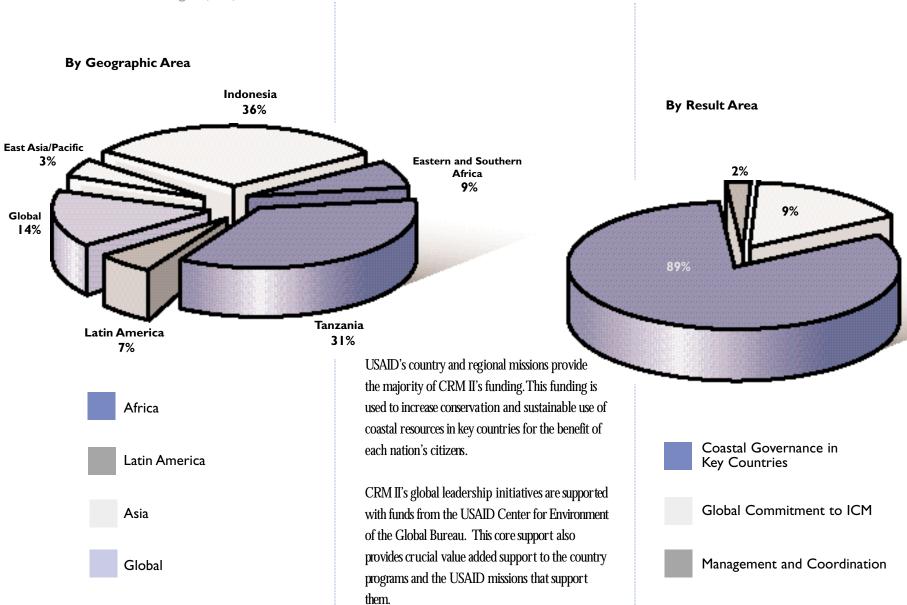
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## Financial Overview

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# Coastal Resources Management Project II - 2000 Results

INCREASING CONSERVATION AND SUSTAINABLE USE OF COASTAL RESOURCES

#### COASTAL MANAGEMENT REPORT #2228

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# Coastal Resources Center

The Coastal Resources Center at the University of Rhode Island is dedicated to advancing coastal management worldwide.

In addition to assisting in the development and implementation of coastal management programs in Rhode Island and the United States, the Center is active in countries throughout the world in promoting the sustainable use of coastal resources for the benefit of all.

Implementing coastal management projects in the field, building capacity through education and training, and sharing lessons learned and information throughout the coastal community are the foundation of the Coastal Resources Center's work.

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